



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

COMMISSIONER'S OFFICE
SUITE 700, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-2848

PAUL DEGGES
INTERIM COMMISSIONER

BILL LEE
GOVERNOR

TO: Will Reid, Assistant Chief Engineer of Operations

FROM: ^{h?}Brad Freeze, Director of Traffic Operations

SUBJECT: **Proprietary Item Request and Justification
City of Murfreesboro**

Traffic Signal Detection: The City of Murfreesboro is requesting that Wavetronix radar traffic signal detection equipment be used in all signalization projects within the I-24 Smart Corridor area over the next three years where Federal and/or State funding are used.

The I-24 Smart Corridor area is described as:

- I-24 from the SR-1(US-41/Murfreesboro Pike, Exit 52) interchange in Davidson County to the SR-10 (US-231/Shelbyville Hwy./South Church Street, Exit 81) interchange in Rutherford County.
- SR-1 (US-41/Murfreesboro Pike) from the I-24 interchange in Davidson County to the SR-10 (US-231/Shelbyville Hwy./South Church Street) intersection in Rutherford County.
- The major connecting corridors between the I-24/SR-1 corridors which includes SR-155 (Briley Parkway), SR-255 (Harding Place/Donelson Pike), SR-254 (Bell Road), SR-171 (Old Hickory Blvd./Hobson Pike), Waldron Road/Parthenon Blvd., SR-266 (Sam Ridley Parkway), SR-102 (Almaville Road/Nissan Drive), I-840, Medical Center Parkway, SR-96 (Old Fort Parkway), SR-99 (New Salem Hwy.), and SR-10 (US-231/Shelbyville Hwy./South Church Street).

The following are justification items for this request:

- The I-24 Smart Corridor area corridor strategy includes improving corridor reliability by reducing congestion and delays through traffic signal optimization, interconnectivity, and the installation of connected vehicle technologies. The effective operation of this strategy is reliant on Intelligent Transportation System field elements such as efficient and reliable vehicular detection equipment.
- The Nashville Metropolitan Government of Nashville and the Town of Smyrna currently have proprietary approval for Wavetronix radar traffic signal detection equipment that expires on 6/20/2020 and 12/19/2021, respectively.
- The use of Wavetronix radar traffic signal detection equipment as the standard for the I-24 Smart Corridor project will be a cost savings in stocking replacement equipment that will result in faster and less costly repair. In addition, technicians will be able to quickly diagnose problems with field units which reduces the time required to maintain the system overall and helps keep the system operational during heavy traffic times to insure maximum capacity of the synchronized system.

I, Brad Freeze, Director of the Traffic Operations Division of the Tennessee Department of Transportation, do hereby certify that in accordance with the requirements of 23 CFR 635.411(a) (2) that the patented or proprietary items listed above are essential for the synchronization of existing facilities.



Assistant Chief Engineer of Operations

1/28/19

Date



... creating a better quality of life.

December 21, 2018

Brad Freeze, Director, Traffic Operations Division
Tennessee Department of Transportation
Suite 1200, James K. Polk Building
505 Deadrick Street
Nashville, TN 37243

SUBJECT: Proprietary Item Request and Justification
I-24 Smart Corridor: Active Arterial Management Phase
Traffic Signal Detection for the City of Murfreesboro

Dear Brad:

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Please let me know if you have questions or need further information regarding this request.

Sincerely,

A handwritten signature in blue ink that reads "Jim Kerr". The signature is written in a cursive style with a large, stylized "K" and a trailing flourish.

Jim Kerr
Transportation Director

Cc: Steve Bryan, TDOT Traffic Operations Division Section Manager